

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A computer-implemented method for upgrading the schema of a database, comprising:

    updating, by the computer, a database update message from a first version to an upgraded version by chaining through one or more intermediate upgraded versions, wherein updating comprises

        receiving an update message having a first version format, and

        repeatedly generating a revised update message having a next most recent version format based on the update message until a final revised update message having the upgraded version format is generated, wherein generating a revised update message having a next most recent version format includes receiving a first update message and calling a next most recent version mapping function to map contents of the first update message to generate a second update message; and

    applying, by the computer, the final revised update message to the database to write an upgraded version of the schema of the database.

2. (Canceled)

3. (Original) The method of claim 1, wherein the update message includes a set of records for a database in the first version.

4. (Original) The method of claim 3, wherein the set of records for the database in the first version is a complete set of records for the database.

5. (Currently amended) A computer readable storage medium having instructions stored thereon, which when executed by a computer, cause the computer to perform a method for upgrading the schema of a database, comprising:

    updating a database update message from a first version to an upgraded version by chaining through one or more intermediate upgraded versions, wherein updating comprises

        receiving an update message having a first version format, and

        generating repeatedly a revised update message having a next most recent

        version format based on the update message until a final revised update message

        having the upgraded version format is generated, wherein generating a revised

update message having a next most recent version format includes receiving a first

update message and calling a next most recent version mapping function to map

contents of the first update message to generate a second update message; and

    applying the final revised update message to the database to write an upgraded version of the schema of the database.

6. (Canceled)

7. (Currently amended) The computer readable storage medium article of manufacture of claim 5, wherein the update message includes a set of records for a database in the first version.

8. (Currently amended) The computer readable storage medium article of manufacture of claim 7, wherein the set of records for the database in the first version is complete set of records for the database.

9. (Currently amended) An apparatus comprising:

means for a processor; and  
a memory coupled with the processor and storing instructions which, when executed by the processor, cause the processor to update updating a database update message from a first version to an upgraded version by chaining through one or more intermediate upgraded versions, wherein updating comprises

receiving an update message having a first version format, and

repeatedly generating a revised update message having a next most recent

format based on the update message until a final revised update message having the upgraded version format is generated, wherein generating a revised update

message having a next most recent version format includes receiving a first update

message and calling a next most recent version mapping function to map contents

of the first update message to generate a second update message[[:]] and

~~means for applying~~ apply the final revised update message to a database to write an upgraded version of a schema of the database.

10. (Canceled)

11. (Original) The apparatus of claim 9, wherein the update message includes a set of records for a database in the first version.

12. (Original) The apparatus of claim 11 wherein the set of records for the database in the first version is a complete set of records for the database.

13. (Currently amended) An apparatus for upgrading the schema of a database, comprising:  
a network switching device to receive an update message having a first version format,  
wherein the network switching device receives a first update message;  
a mapper to call a next most recent version mapping function to map contents of the  
first update message to generate a second update message; and  
a controller card to update a message from a first version to an upgraded version by chaining through intermediate upgraded versions, the controller card to repeatedly generating a revised update message having a next most recent version format based on the update message until a final revised update message having the upgraded version format is generated and apply the final upgraded version of the update message to the database to write an upgraded version of the schema of the database.

14-15. (Canceled)

16. (Previously presented) The apparatus of claim 13, wherein the update message includes a set of records for a database in the first version.

17. (Previously presented) The apparatus of claim 16, wherein the set of records for the database in the first version is a complete set of records for the database.